



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

and herself, first on the White Nile far above Khartûm, and afterwards in the endeavour to travel westwards, amid many perils and disasters, by Khol and Ngam Gara to the former ivory station of Mr. Petherick, or Nyam-Bara, whence they passed through a most interesting country to Gondokoro. The letter is written with much feeling, and makes known to us that Mr. Petherick was lying too unwell at Khartûm to be able to write himself.

I am also bound to make known that Mrs. Petherick states that her husband had rendered himself unpopular in that region by his efforts to check the trade in slaves.

This letter, or portions of it, may be read before the Society as soon as we receive advices from Mr. Petherick explanatory of his geographical researches. The state of his health, we must presume, has prevented him from transmitting to us, as we had a right to expect before now, some account of his travels; particularly as I learn from one of his companions, Mr. Murie, an able naturalist, who has arrived in England, and who is present on this occasion, that many astronomical observations were made during the expedition, all of which were registered in books. Although the main object for which we subscribed our money—the succour of Speke and Grant—was, through the disasters of Petherick, to a great extent delayed, I trust that we may yet be furnished with such an amount of geographical data, particularly in reference to the hitherto untravelled country between Nyam-Bara and Gondokoro, as will satisfy geographers that the pecuniary means which they placed at the disposal of Mr. Petherick have not been expended without affording us some good results.

Lastly, I have to announce that our associate, Mr. Tinné, who is present, has received letters of the 1st July from his relatives the Dutch ladies, whose travels have excited so much interest; and, if time permit, he will communicate an outline of this correspondence.

The first Paper read was—

1. *On the Snowy Mountains of Eastern Equatorial Africa.* By the Baron CHARLES VON DECKEN.

AFTER apologising for the meagreness of the present communication, consequent on all his papers being at Zanzibar, the author mentioned that, on leaving Mombas, he proceeded southward along the coast to Wanga, and thence struck westward up the river Umba. On reaching the Ugono range, 5000 feet high, he found himself among a well-formed race, sufficiently civilized to smelt iron—very rudely, certainly—but with sufficient success to enable them to

make no contemptible weapons. He experienced in several places much opposition from the natives, who had got a notion that the bare presence of a European would prove fatal to their cattle. On leaving the Wa-Ugono, or people of Ugono, he coasted Lake Jipé on the west side (having previously, in company with Mr. Thornton, traversed its western shores), and, on reaching the northern end, discovered that the river Daffeta, after entering it from the elevated tract beyond, left it within a mile or two of its entrance, the course of the river turning abruptly at almost a right angle. The next point was the Aruscha range, about 4000 feet high, to the westward of which, at a considerable distance, was another lofty range. This would probably be found to be the eastern watershed of Lake Victoria Nyanza. From this point there, was a fine view of the two peaks of Kilima-njaro, a sketch of whose snowy summits was exhibited. He now fell in with two minor kingdoms, in which, after going through various ceremonies, such as drinking blood with the chiefs, &c., he found himself about to be hampered by the untrustworthiness which is so characteristic of the African tribes, and therefore pushed forward to ascend the mountain. Here, accompanied by Dr. Kärsten, an accomplished astronomical observer, he encamped the first night at 6000 feet, the next at 11,000, in heavy rain, which, on the weather clearing off in the morning, proved to have been snow, at an elevation of about 13,000 feet. This disappeared by about 9 A.M., but left a clearly defined limit of what seemed to be perpetual snow at about 17,000 feet, the triangulations having previously given the main peak an elevation of 20,065 feet, and the other upwards of 17,000. Still advancing upwards, he attained a height of 13,900 feet, when his companions having given out, owing to the increasing rarefaction of the atmosphere, he was compelled to retrace his steps. He then returned through the Djagga country to the coast. The paper concluded by briefly detailing the alternative routes which Baron von Decken had sketched out for his future exploration. One of the most interesting features of Baron von Decken's paper was a detailed account of a fly, called by the natives "Donderobo," whose bite, as deadly as that of the better known Tsetse, was fatal to asses and goats only; involving serious inconvenience and even danger to the expedition, by the destruction of the draught asses of the caravan. The effect of the poison seemed to be to produce tubercular deposit, following immediately upon acute inflammation.

The PRESIDENT having invited remarks—

MR. MACQUEEN said it was satisfactory indeed to find Baron von Decken

confirming in such a clear and decided manner the information conveyed to us fifteen years ago by those indefatigable and intelligent men the Church missionaries, which, though clearly and minutely given, has for many years been distrusted. In reference to the height of these mountains, he might remark that every 5000 feet in height gives a line of vision of 83 geographical miles when not obstructed by intermediate heights. Consequently, the height, as estimated, gave a circumference of vision of 332 geographical miles, and by that of Baron Decken 340 miles, which shows at once the error of those who place these mountains so near to the coast as has been in some instances done.

It was satisfactory to him to have his estimates so nearly confirmed by the actual observations of the Baron. He wished to draw the Baron's particular attention to Dr. Krapf's journey from Mombas to Wa-Mbané. In journeying along the north side of those mountains, he crossed a considerable but clear, cold stream, the river Tzavoi, which rises on the north-east face of Kilimanjaro. Hereabouts the lower mountain hid the higher from his view. Soon after the higher with its snow-covered top came in view, and two days' journey farther to the westward he crossed the river Adi, a fine stream, but then very low. This stream rises in the south corner of a very mountainous range to the north-west. From this river he proceeded through the high land of Yata in Wa-Mbané.

The river Duna, which he next visited, at the point he saw it was from 150 to 200 yards wide and 7 feet deep, with a current of about 4 miles per hour. This was at the very close of the dry season, yet here was a river of very considerable magnitude, running into the Bay of Formosa. It rises on the north side of Mount Kenia. At Rivoi's village Dr. Krapf saw the snow-clad Kenia bearing about n.w. by w., and to the south of it, on the bearing of w.n.w., he saw another mountain, with two dome-like peaks at each end, also covered with snow. From the small angle at which this range of mountains was seen, its distance west must have been somewhat greater than the other. On the west side of Mount Kenia there is a lake, from which issues a river said to run to Massir (Egypt). At some distance west of Kilima-njaro Dr. Krapf describes another mountain, at least 18,000 feet high. Beyond this is Bahuringe (? Baringa of Speke and Grant. [Ed.])

In reply to Captain Maury, BARON VON DECKEN said his first ascent was made in the month of June, and the second (that detailed before the Meeting) about the end of November. The rainy season commenced in the month of June, and extended through July, August, and September; but near the Djagga the rainy season extended over nearly ten months of the year. It was only for two months that there was really no rain; during the other ten months there was rain every day. The rain nearly always fell in the evening, and commenced with a heavy north-east wind.

CAPTAIN MAURY said the rains at Pará, at the mouth of the Amazon, which was still nearer to the Equator, had a similar feature of regularity about them. There, however, they commenced about two in the afternoon, and so regularly, that people regulated their appointments by them, saying, "Come to me half-an-hour before the rain." In these explorations it was a matter of interest to find out not only the prevailing direction of the winds, but the quantity of rain that fell, and the time of day as well as the season of the year in which it fell. Because it must be obvious to every one that there is a close connection between the meteorological phenomena, and the fauna and flora of every latitude—one was the complement of the other; therefore, when a traveller gave us information respecting the one, we could draw general conclusions with regard to the other. He recollected listening, at a previous meeting, to a paper on Madagascar, in which the author stated that one of the principal features that attracted his attention was the remarkable development of vegetation, so different from the vegetation in the corresponding latitudes on

the coast of the mainland of Africa. Knowing this fact, viz. that the flora of Madagascar is very different from the flora of the neighbouring coast, between the same parallels, we know also that the fauna must be very different, because the flora is the foundation, as it were, upon which rests the fauna of any particular region. When we come to account for this remarkable difference in the vegetation of the two regions, we find that Madagascar is for a certain season of the year in the line of the south-east trade-winds, which come charged with moisture; and the moisture being drawn off by the mountains of Madagascar, the atmosphere is left comparatively dry, and in this state it makes its way to the mainland. One most interesting feature in these African explorations was the glimpses which we obtained of the meteorological conditions of that unknown country as bearing upon its flora and fauna. Thus there was no equatorial region in the world, except Peru; where the rains were so scanty as on the eastern coast of Africa, in the region of the head-waters of the Nile. According to the rain-gauges of Grant and Speke, the rainfall throughout the year is not greater on the average than that of England. It was the knowledge of these facts which enabled us to form some sort of estimate as to what the country in question is fit for. Where there is no moisture, there is sterility, as in the deserts of Sahara; on the contrary, where there is moisture, as in the valley of the Amazon and in Madagascar, there is a profusion of vegetation. Applying this rule, then, to the newly-discovered regions of Central Africa, he should say that they were eminently fitted for the cultivation of coffee, tobacco, and perhaps sugar. With regard to the Snowy Mountains, it appeared to him that the snow must be due to the south-east trade-wind, which, not being turned aside to supply the south-west monsoon of India, keeps up the stream of moisture which the Baron spoke of as lasting nearly all the year round, and which would keep the mountains covered with snow. One consequence of this steady fall of moisture and accumulation of snow was to be found a little farther to the north. The reservoirs of the Nile consist of lakes, which feed that river precisely as the reservoirs above Niagara feed the St. Lawrence, keeping them nearly at the same level, and precisely as the reservoirs in Minnesota feed the upper waters of the Mississippi. When we compare the two branches of the Nile, one fed by lakes and the other by snows, with the two great branches of the Mississippi, we find that when the floods on the Ohio are coincident with the melting of the snows on the Missouri, we have tremendous inundations in the lower country, just as we had the other day on the Nile, in consequence, no doubt, of a precisely similar coincidence with regard to its two main branches. But in all these explorations it is frequently as desirable to know what trees, plants, birds, and mammals the traveller does not see as to know what he does see. Negative information is often most important.

In reply to a series of questions by Mr. Crawford, BARON VON DECKEN said there were no horses nor donkeys in the region of Kilima-njaro; they only came with caravans from the coast. At Djagga he was the first person who brought a donkey there, and it made more impression upon the natives than the presence of white men. Cattle were plentiful, of the same species nearly as those in the Gallas country. There were goats and two kinds of sheep, one with a long tail and the other with a fat tail. Turkish corn, a species of potato, and bananas were grown. He found bananas at an elevation of 5000 feet. Cocoa-nuts he never found more than two days from the coast. The sugar-cane grew in abundance in the lower country, but not in the Djagga. He saw no wild coffee.

SIR EDWARD BELCHER said he had visited nearly every part of the coast of Equatorial Africa on the west side, and his observations agreed with those of Captain Maury as to the limited rainfall. He would ask at what altitude did the Baron experience these constant rains?

BARON VON DECKEN.—It was nearly 5000 feet.

SIR EDWARD BELCHER said this could form no rule with respect to the condition of things on the sea level, where he was inclined to think that very little rain might fall when this constant moisture was experienced at such an elevation. It was indeed above the cloud level; and those who had visited places on and near to the Equator, as at Borneo and Penang, knew, even at 2000 feet above the sea level, that in the dry season rain-clouds and extreme cold prevailed.

The PRESIDENT remarked that the existence of the Snowy Mountains had been stoutly contested so recently as the preceding Saturday by a well-known geographer. To have physical proofs brought before them for the first time that these mountains were covered with snow, invested the question with considerable importance. The measurement of the altitude would sufficiently account for the fact.

The EARL OF DONOUGHMORE said as the fly which had been described was fatal to asses, he presumed that mules would run the same danger; therefore he should like to ask whether the Baron considered the country suitable for camels. In exploring this region it appeared that the great difficulty travellers had to contend with was the impossibility of getting beasts of burden. They were, consequently, obliged to travel with large caravans of porters, and their movements were much impeded, owing to the danger there was of the porters being driven away by hostile tribes.

BARON VON DECKEN replied, that camels would never do; there was such a quantity of mimosa and thorns that camels could never pass through them. There were very few roads, and these roads were alone practicable for camels. For his part he preferred to push his way through the bush. There were no mules in the country, nor were there any on the coast.

MR. CRAWFURD asked Baron von Decken if he had ever known the negroes to acquire the art of taming the elephant? The elephant would be fit for that country if only the negro had ingenuity enough to domesticate the elephant, as was done by people in other parts of the world, in which it was indigenous.

BARON VON DECKEN said he had never known an instance of the kind; MR. CRAWFURD remarking thereupon that he had expected such would prove to be the case.

The BISHOP OF NATAL asked whether the languages of the eight nations, which were said to have no connection, were similar to the languages of South Africa, in having the plural formed by prefixing a particle—a modification of the prefix which marks the singular?

BARON VON DECKEN said there was this connection: the people of the *Ugono* country were called *Wa-Ugono*; the people of the *Djagga* country were called *Wa-Djagga*. But there was no prefix to distinguish the plural from the singular.

The BISHOP OF NATAL asked, Would the plural of the name of the fly (*u-don-derobo*) be *o-donderobo* or *aba-donderobo*?

BARON VON DECKEN said in the Mossi language it would be *wa-don-derobo*; but in the different native languages it would be just the same as the singular. He was not able to say whether there was any relation between those languages and the languages of South Africa.

MR. TINNÉ asked if the Baron observed any rivers going westward or north-westward towards Victoria Nyanza?

BARON VON DECKEN replied he never had an opportunity of looking to the north; the range of the Kilima-njaro was too high for him to see in that direction. About thirty miles to the westward there was another range extending a considerable distance, which precluded the idea of any rivers flowing westward towards Lake Nyanza.